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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/576,065

Applicant(s)

GOBARA ET AL.

Examiner

PETER CHAU

Art Unit

4144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/13/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 107, 108, 110, 111, 119, 120, 122, 131, 132, 135, 136, 138, 139, 143 and 144 is/are rejected.
- 7) ☒ Claim(s) 109, 112, 121, 123, 133-134, 137, 140-141, 145 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/8/2007, 8/24/2006, 4/13/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1, 107-112, 119-123, 131-141 and 143-145 have been examined and are pending.

Information Disclosure Statement

2. An initialed and dated copy of Applicant's IDS form 1449 submitted on 4/13/2006, 8/24/2006 and 2/8/2007, is attached to the Office Action.

Specification

3. The disclosure is objected to because of the following informalities: numerous spelling mistakes.

Appropriate correction is required.

4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code in the Background Art. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. **Claims 108, 110-112, 123 and 136 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. **Claims 110, 111, 112 and 123** recites the limitation "the server." There is insufficient antecedent basis for this limitation in the claim. The examiner will assume there is a server present.
8. **Claims 108 and 111** recites the limitation "the range receiver of the server." There is insufficient antecedent basis for this limitation in the claim. The examiner will assume the range receiver of the server is the range detector.
9. Claim 136 recites the limitation "the port detection packet..." There is insufficient antecedent basis for this limitation in the claim. The examiner will assume it to be the range detection packet.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. **Claim 1 is provisionally rejected** on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 89 of copending Application No. 10/576588 (

US 2007/0091798). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 89 of the copending application 10/576588 anticipates claim 1 of the instant application. (*In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993)*).

11. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. **Claim 131 is provisionally rejected** on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 110 of copending Application No.

10/576/588. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 110 of the copending application 10/576588 anticipates claim 131 of the instant application. (*In re Goodman (CAFC) 29 USPQ2d 2010 (12/3/1993)*).

13. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. **Claims 1, 131 and 143 are rejected** under 35 U.S.C. 102(e) as being anticipated by U.S.

PGPub 2008/0215669 to Gaddy et al. (hereinafter “Gaddy”).

As per claim 1, Gaddy teaches a communication system comprising:

a first information processor, a second information processor, a first communication control unit for controlling the communication of the first information processor, and a second communication control unit for controlling the communication of the second information processor, wherein the first information processor includes (page 2 right column paragraph [0034], discloses the calling client (**first information processor**) sends the second tuple to the called client (**second information processor**); page 2 left column paragraph [0032], discloses the clients are behind symmetric or cone firewalls/NATS (**first and second communication control unit**); page 1 left column paragraph [0012], discloses firewalls are configured to allow client/server connections):

a bubble packet transmitter for transmitting a bubble packet for leaving transmission record in the first communication control unit to the second communication control unit via the first communication control unit (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 2 right column paragraph [0038], discloses the calling client transmitting packets to the receiving end and then the firewall forwards the packet to the client),

and a reply packet receiver for receiving a reply packet transmitted from the second information processor via the second communication control unit to a bubble packet transmitting port, a port of the first communication control unit, which is used in transmission of the bubble packet (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 3 left column

paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port)

and the second information processor includes:

a reply packet transmitter for transmitting the reply packet to one or more ports including at least the bubble packet transmitting port (page 3 left column paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port).

As per claim 131, Gaddy teaches a first information processor communicating with a second information processor via a first communication control unit for controlling the communication of the first information processor and a second communication control unit for controlling the communication of the second information processor, wherein a bubble packet for leaving communication record in the second communication control unit is transmitted from the second information processor to the first communication control unit via the second communication control unit, comprising (page 2 right column paragraph [0034], discloses the calling client (first information processor) sends the second tuple to the called client (second information processor); page 2 left column paragraph [0032], discloses the clients are behind symmetric or cone firewalls/NATS (first and second communication control unit); page 1 left column paragraph [0012], discloses firewalls are configured to allow client/server connections; page 2 right column paragraph [0038], discloses the calling client

transmitting packets to the receiving end and then the firewall forwards the packet to the client; page 3 right column paragraph [0055], discloses the invention may be replaced by alternative features serving the same purpose and equivalents).

a reply packet transmitter for transmitting a reply packet to one or more ports including at least a port of the second communication control unit used in transmission of the bubble packet from the second information processor (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 3 left column paragraph [0039], discloses when the receiving end has received an incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port; page 3 right column paragraph [0055], discloses the invention may be replaced by alternative features serving the same purpose and equivalents).

As per claim 143, Gaddy discloses a communication method used in the second information processor of a communication system comprising a first information processor, a communication control unit for controlling the communication of the first information processor, a second information processor, and a second communication control unit for controlling the communication of the second information processor, wherein a bubble packet for leaving communication record in the second communication control unit is transmitted from the second information processor to the first communication control unit via the second communication control unit, comprising (page 2 right column paragraph [0034], discloses the calling client (first information processor) sends the

second tuple to the called client (second information processor); page 2 left column paragraph [0032], discloses the clients are behind symmetric or cone firewalls/NATS (first and second communication control unit); page 1 left column paragraph [0012], discloses firewalls are configured to allow client/server connections; page 2 right column paragraph [0038], discloses the calling client transmitting packets to the receiving end and then the firewall forwards the packet to the client; page 3 right column paragraph [0055], discloses the invention may be replaced by alternative features serving the same purpose and equivalents):

a reply packet transmitting step for transmitting a reply packet to one or more ports including at least a port of the second communication control unit used in transmission of the bubble packet from the second information processor (page 3 left column paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port; page 3 right column paragraph [0055], discloses the invention may be replaced by alternative features serving the same purpose and equivalents).

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

18. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

19. **Claims 107-108 and 110-111 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Gaddy as applied to claim 1 above, and further in view of WIPO publication WO 02/082794 to Fangman et al. (hereinafter "Fangman") (IDS filed on 4/13/2006).

As per claim 107, Gaddy teaches the communication system of claim 1. While Gaddy discloses further comprising a server (page 2 right column paragraph [0034], discloses a well-known, open, and agreed upon server), wherein the first information processor further includes, a detection packet transmitter for transmitting a detection packet used for

detecting the port including the bubble packet transmitting port to the server (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

and the server includes:

While Gaddy discloses a detector which receives the detection packet for detecting the port including the bubble packet transmitting port in accordance with the detection packet (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses a transmitter for transmitting information detected by the detector as information showing the port including the bubble packet transmitting port to the second information processor (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

and the second information processor further includes:

While Gaddy discloses a receiver for receiving the information (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses the reply packet transmitter transmits the reply packet to ports indicated by the information (page 3 left column paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port

and then use that port to send all traffic to that port.), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 108, Gaddy teaches the communication system of claim 107. While Gaddy discloses wherein the detection packet transmitter of the first information processor transmits the detection packet before and/or after transmission of the bubble packet (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses the receiver of the server receives the detection packet transmitted before and/or after transmission of the bubble packet (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client

via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 110, Gaddy teaches the communication system of claim 1, further comprising a server (page 2 right column paragraph [0034], discloses a well-known, open, and agreed upon server), **wherein the first information processor further includes:**

While Gaddy discloses a detection packet transmitter for transmitting a detection packet used for detecting the port including the bubble packet transmitting port to the server (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

a detection port information receiver for receiving detection port information showing the port position of the first communication control unit through which the range detection packet has passed (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server).

While Gaddy discloses a detector for detecting the port including the bubble packet transmitting port in accordance with detection port information received by the detection port information receiver (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the

ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses a transmitter for transmitting information detected by the detector as information showing the port including the bubble transmitting port (page 2 right column paragraph [0034], discloses the calling client retrieves this information (proper tuple) from the discovery servers and sends the second tuple (combination of source/destination port, source/destination address) to the called client via a well-known open, and agreed upon server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

and the server further includes:

While Gaddy discloses a detection port detector which receives the detection packet for detecting the port position of the first communication control unit through which the range detection packet has passed (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 3 right column paragraph [0057], discloses the discovery server will respond to request from clients

with a response containing the requesting client's public port), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

a detection port information transmitter for transmitting detection port information showing the port position detected by the detection port detector to the first information processor (page 3 right column paragraph [0057], discloses the discovery server will respond to request from clients with a response containing the requesting client's public port; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server),

and the second information processor further includes:

While Gaddy discloses a receiver for receiving the information (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses the reply packet transmitter transmits the reply packet to ports indicated by the information (page 3 left column paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port.), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 111, the combination of Gaddy and Fangman teaches the communication system of claim 110. While Gaddy discloses wherein the detection packet transmitter of the first information processor transmits the detection packet before and/or after transmission of the bubble packet (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to increase the range of applications using the

ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses the receiver of the server receives the detection packet transmitted before and/or after transmission of the bubble packet (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the system of Gaddy to establish IP communication (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports).

20. **Claims 119, 120 and 122 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Gaddy and further in view of Fangman.

As per claim 119, Gaddy teaches a first information processor communicating with a second information processor via a first communication control unit for controlling the communication of the first information processor and a second communication control unit for controlling the communication of the second information processor, comprising (page 2 right column paragraph [0034], discloses the calling client (first information processor) sends the second tuple to the called client (second information processor); page 2 left column paragraph [0032], discloses the clients are behind symmetric or cone firewalls/NATS (first and second communication control unit); page 1 left column paragraph [0012], discloses firewalls are

configured to allow client/server connections; abstract, discloses having two clients both having a firewall for receiving packets of source/destination ports from a fire-walled client and the firewall forwards the packet to the client);

a bubble packet transmitter for transmitting a bubble packet for leaving transmission record in the first communication control unit to the second communication control unit via the first communication control unit (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 2 right column paragraph [0038], discloses the calling client transmitting packets to the receiving end and then the firewall forwards the packet to the client);

While Gaddy discloses a detection packet transmitter for transmitting a detection packet used for detecting the port including the bubble packet transmitting port (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

and a reply packet receiver for receiving a reply packet transmitted from the second information processor via the second communication control unit to a bubble packet

transmitting port, a port of the first communication control unit, which is used in transmission of the bubble packet (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 3 left column paragraph [0039], discloses when the receiving end has received an incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port);

As per claim 120, the combination of Gaddy and Fangman teaches the first information processor of claim 119. While Gaddy discloses wherein the detection packet transmitter transmits the detection packet before and/or after the bubble packet is transmitted by the bubble packet transmitter (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 122, the combination of Gaddy and Fangman teaches the first information processor of claim 119 further comprising:

a detection port information receiver for receiving detection port information showing the port position of the first communication control unit through which the range detection packet has passed (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server).

While Gaddy discloses a detector for detecting the port including the bubble packet transmitting port in accordance with detection port information received by the detection port information receiver (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses a transmitter for transmitting information detected by the detector as information showing the port including the bubble transmitting port (page 2 right column paragraph [0034], discloses the calling client retrieves this information (proper tuple) from the discovery servers and sends the second tuple (combination of source/destination port, source/destination address) to the called client via a well-known open, and agreed upon server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

21. **Claim 132 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Gaddy as applied to claim 131 above, and further in view of Fangman.

As per claim 132, Gaddy discloses the first information processor of claim 131, further comprising:

While Gaddy discloses a receiver for receiving the information showing the port for transmitting the reply packet (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses wherein the reply packet transmitter transmits the reply packet to port indicated by the information (page 3 left column paragraph [0039], discloses when the receiving end has received a incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port.), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the apparatus of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

22. **Claims 135, 136, 138 and 139 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Gaddy in view of Fangman.

As per claim 135, Gaddy teaches a communication method used in the information processor of a communication system comprising an information processor, a communication control unit for controlling the communication of the information processor, and a server, comprising (page 2 right column paragraph [0034], discloses the calling client (first information processor) sends the second tuple to the called client (second information processor); page 2 left column paragraph [0032], discloses the clients are behind symmetric or cone firewalls/NATS (first and second communication control unit); page 1 left column paragraph [0012], discloses firewalls are configured to allow client/server connections; abstract, discloses having two clients both having a firewall for receiving packets of source/destination ports from a fire-walled client and the firewall forwards the packet to the client; page 2 right column paragraph [0034], discloses a well-known, open, and agreed upon server);

a bubble packet transmitting step for transmitting a bubble packet for leaving transmission record to the communication control unit via the communication control unit (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATS; page 2 right column paragraph [0038], discloses the calling client transmitting packets to the receiving end and then the firewall forwards the packet to the client);

While Gaddy discloses a detection packet transmitting step for transmitting a detection packet used for detecting the port including the bubble packet transmitting port (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the

client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

and a reply packet receiving step for receiving a reply packet transmitted to one or more ports including at least the bubble packet transmitting port (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs; page 3 left column paragraph [0039], discloses when the receiving end has received an incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port).

As per claim 136, the combination of Gaddy and Fangman teaches the communication method of claim 135.

While Gaddy discloses wherein the port detection packet is transmitted before and/or after the bubble packet is transmitted in the bubble packet transmitting step (page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a

discovery server to obtain the proper tuple), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 138, the combination of Gaddy and Fangman teaches the communication method of any one of claim 135.

Further comprising: a detection port information receiving step for receiving detection port information showing the port position of the communication control unit through which the range detection packet has passed (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server).

While Gaddy discloses a detecting step for detecting the port including the bubble packet transmitting port in accordance with detection port information received by the detection port information receiver (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column

paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses a transmitting step for transmitting information detected by the detector as information showing the port including the bubble transmitting port (page 2 right column paragraph [0034], discloses the calling client retrieves this information (proper tuple) from the discovery servers and sends the second tuple (combination of source/destination port, source/destination address) to the called client via a well-known open, and agreed upon server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

As per claim 139, the combination of Gaddy and Fangman teaches the communication method of any one of claim 136.

Further comprising: a detection port information receiving step for receiving detection port information showing the port position of the communication control unit through which the range detection packet has passed (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server).

While Gaddy discloses a detecting step for detecting the port including the bubble packet transmitting port in accordance with detection port information received by the detection port information receiver (page 2 left column paragraph [0032], discloses peer-to-peer connectivity between clients behind symmetric or cone firewalls/NATs ; page 2 left column paragraph [0032], discloses discovering what the proper tuple (source/destination port, and source/destination address combination) is required to allow the client's firewall to forward packets to the client; page 2 right column paragraph [0033], discloses contacting a discovery server to obtain the proper tuple; page 2 right column paragraph [0034], discloses the calling client receiving this information from the discovery server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses a transmitting step for transmitting information detected by the detector as information showing the port including the bubble transmitting port (page 2 right column paragraph [0034], discloses the calling client retrieves this information (proper tuple) from the discovery servers and sends the second tuple (combination of source/destination port, source/destination address) to the called client via a well-known open, and agreed upon server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

23. **Claim 144 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Gaddy as applied to claim 143 above, and further in view of Fangman.

As per claim 144, Gaddy teaches the communication method of claim 143, further comprising:

While Gaddy discloses a receiving step for receiving information showing the port for transmitting the reply packet (page 2 right column paragraph [0034], discloses the calling client sending source/destination port to the called client via a server), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

While Gaddy discloses wherein the reply packet is transmitted to ports in the range indicated by the range information in the reply packet transmitting step (page 3 left column paragraph [0039], discloses when the receiving end has received an incoming packet, it sends a response packet to the sender; page 2 right column paragraph [0038], discloses the receiving end takes note of the packet's source port and then use that port to send all traffic to that port.), **Gaddy does not, but Fangman discloses including range** (page 3 lines 28-29, discloses a range of assigned ports).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include range in the method of Gaddy to increase the range of applications using the ports such as video and/or audio (Fangman, page 3 lines 28-29, discloses IP communication using the range of ports for the IP telephone).

Allowable Subject Matter

24. **Claims 109, 112, 121, 123, 133, 134, 137, 140, 141, 145 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPub 2006/0218624 Ravikumar et al. Teaches a method and system for enhancing peer-to-peer communications.

U.S. PGPub 2005/0210126 Friedman. Teaches a system and method for logical port configuration.

U.S. Patent 7,328,280 Takeda et al. Teaches facilitating peer-to-peer communications through network address translations.

U.S. Patent Biswas et al. Teaches techniques for improving traffic congestion between two networks.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PETER CHAU whose telephone number is (571)270-7152. The examiner can normally be reached on Monday-Friday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on 571-242-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./
Examiner, Art Unit 4144
/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4144